

IN THE CLAIMS:

The following listing of claims replaces all prior versions:

1. (currently amended): A portable computer system comprising:

- a bus;
- a processor coupled to said bus;
- a housing comprising a dielectric elastomer electronic muscle material, said dielectric elastomer electronic muscle material, when moved, causing said processor to behave in a prescribed manner and wherein said electronic muscle material conforms to the shape of user's hand for improved ergonomics and wherein said conformance to shape of user's hand generates contour data which is used by said processor to identify a user for purpose of user authorization~~said electronic muscle material vibrates at a frequency as specified by said processor for use as a speaker;~~
- a display device coupled to said bus and for providing a visual display; and
- wherein said processor implements a user interface for controlling said display.

2. (original): The portable computer system of Claim 1 further comprising a battery and wherein movement of said electronic muscle material causes charging of said battery.

3. (original): The portable computer system of Claim 1 wherein movement of said electronic muscle material causes said processor to sense handling by user for determination of left-handedness or right-handedness thereof.

4. (original): The portable computer system of Claim 3 wherein in response to said determination of handedness said electronic muscle material generates a plurality of function buttons in the proximity of user's fingers.

5. (original): The portable computer system of Claim 4 wherein any of said plurality of function buttons vibrate to apprise user of relevant message being displayed.

6. (original): The portable computer system of Claim 4 wherein any of said plurality of function buttons protrudes from said housing to apprise user of relevant message being displayed.

7. (original): The portable computer system of Claim 1 wherein said electronic muscle material vibrates for apprising the user of a message being displayed.

8-10. (Cancelled)

11. (original): The portable computer system of Claim 1 wherein said electronic muscle material vibrates at a frequency of external sound for use as a microphone.

12. (original): The portable computer system of Claim 11 wherein the location of said vibration moves spatially about the housing for tracking a strongest sound signal.

13. (Currently Amended): A portable electronic device comprising:
a processor coupled to a bus;
a display module for displaying information and coupled to said bus;
a memory for storing information and coupled to said bus;
a dielectric elastomer electronic muscle material coupled to said bus and
for use as an input device ~~and wherein a portion of said electronic muscle~~
~~material functions as a speaker, wherein said electronic muscle material~~
generates information used by said processor for detecting the placement of user
fingers on said electronic muscle material and further wherein said electronic
muscle material grows a plurality of function buttons in the proximity of user's
fingers responsive to the detection of the placement.

14-17. (Cancelled)

18. (previously presented): A portable electronic device as described in Claim 13 wherein the location of said portion is adjusted by said processor to optimize sound characteristics.

19. (original): A portable electronic device as described in Claim 13 wherein a portion of said electronic muscle material functions as a microphone.

20. (original): A portable electronic device as described in Claim 19 wherein the location of said portion is adjusted by said processor to optimize detection characteristics.

21. (Currently Amended): A portable electronic device as described in Claim ~~[[14]]~~ 13 wherein said electronic muscle material generates information used by said processor for detecting the handedness of a user.

22. (Currently Amended): A portable electronic device as described in Claim ~~[[14]]~~ 13 wherein said electronic muscle material generates information used by said processor for detecting the identity of a user.

23. (original): A portable electronic device as described in Claim 13 further comprising a battery and wherein, in response to movement of said electronic muscle material, said electronic muscle material charges said battery.

24. (currently amended): In a portable electronic device, a method of responding to a user comprising the steps of:

a) in response to said user handling said portable electronic device, a dielectric elastomer electronic muscle material therein generating information, one said information comprising a user hand contour; and

b) a processor of said electronic device processing said information and performing a prescribed function, one said prescribed function comprising forming said electronic muscle material into a shape that aligns with said user hand contour for providing user comfort ~~performing a user authentication function.~~

25. (canceled)

26. (original): A method as described in Claim 24 wherein said information comprises a user finger placement and wherein step b) comprises said processor forming buttons within said electronic muscle material that align with positions of said finger placement.

27. (original): A method as described in Claim 24 wherein said information comprises a user hand contour and wherein step b) comprises said processor determining the handed-ness of said user.

28. (Cancelled)

29. (Currently Amended): A portable computer system comprising:

- a bus;
- a processor coupled to said bus;
- a housing comprising a dielectric elastomer electronic muscle material, said dielectric elastomer electronic muscle material, when moved, causing said processor to behave in a prescribed manner and wherein said electronic muscle material conforms to the shape of user's hand for improved ergonomics and wherein said conformance to shape of user's hand generates contour data which is used by said processor to identify a user for purpose of user authorization;
- a display device coupled to said bus and for providing a visual display;
- a battery, wherein stretching and contraction of said electronic muscle material causes charging of said battery based on a change of an electrical property of said electronic muscle; and

wherein said processor implements a user interface for controlling said display.

30. (Cancelled)

31. (Previously Presented): The portable computer system of Claim 29 wherein movement of said electronic muscle material causes said processor to sense handling by user for determination of left-handedness or right-handedness thereof.

32. (Previously Presented): The portable computer system of Claim 31 wherein in response to said determination of handedness said electronic muscle material generates a plurality of function buttons in the proximity of user's fingers.

33. (Previously Presented): The portable computer system of Claim 32 wherein any of said plurality of function buttons vibrate to apprise user of relevant message being displayed.

34. (Previously Presented): The portable computer system of Claim 32 wherein any of said plurality of function buttons protrudes from said housing to apprise user of relevant message being displayed.

35. (Previously Presented): The portable computer system of Claim 29 wherein said electronic muscle material vibrates for apprising the user of a message being displayed.

36. (New) The portable computer system of Claim 1, wherein said electronic muscle material vibrates at a frequency as specified by said processor for use as a speaker.

37. (New) A portable electronic device as described in Claim 13 wherein a portion of said electronic muscle material functions as a speaker.

38. (New) A method as described in Claim 24 wherein said b) comprises said processor performing a user authentication function.